

## REMARKS

The Applicants have herein requested amendment to the pending independent claims of the present application to more clearly indicate the ordered relationship between the steps of the methods, particularly the loading and processing steps.

The present invention is directed at methods of generating multiple images of a patient using an imaging device. The invention, in its various embodiments, comprises collecting image data for a series of views based upon a plurality of parameter sets. Before each set of image data is collected, a parameter set is retrieved from the plurality of parameters sets. The plurality of parameter sets is loaded into the imaging device prior to the collection of any image data. The image data are not processed until after all image data have been collected. The combination of loading parameter sets prior to collection of image data, and delaying processing of image data until after all collecting of image data are but part of a novel solution to a heretofore unsolved imaging problem.

Nevertheless, the Examiner indicated that it would have been obvious to one skilled in the art to have entered all scan parameters before performing the scans in order to expedite the scanning process and reduce the patient's time in the bore of the magnet. The Examiner has based this conclusion on several grounds, all of which will be discussed herein.

In a first rejection, the Office Action states that claims 19, 29, and 35 are obvious in light of the applicant's own admission of the prior art. The applicant has made no such admission, and this rejection is respectfully traversed. Ostensibly, the Examiner has based this rejection on personal knowledge. In that case, the applicant's

respectfully request that the Examiner provide the facts that she feels merit this rejection. This request is made in accordance with 37 CFR 104(d)(2) and MPEP § 2144.03. Absent any showing of facts in support of the Examiner's rationale, the rejection should be withdrawn as improper.

The Examiner has also rejected claims 19, 29, and 35 based again upon the disclosure in Hurd et al. Hurd discloses a method of imaging including the steps of loading a pulse sequence parameter, executing a pulse sequence, separately processing and storing the acquired MR data, and looping back to repeat the steps for a next pulse sequence parameter (Column 3, lines 14-35; Figure 5).

In this rejection, the Examiner has concluded that it would have been obvious to add the additional step of loading the parameter sets prior to collecting image data in conjunction with the additional step of processing image data after all image data has been collected. The Hurd reference does not disclose, teach, or suggest these additional steps. Rather, the Hurd reference explicitly teaches away from the addition of these steps, specifying that "... the acquired MR data is *separately processed* and stored." (Column 3, line 29). Accordingly, Hurd may not be properly used in an obviousness-type rejection.

The Examiner's remaining rationale for rejecting claims 19, 29, and 35 is that it was per se obvious to invent the present invention. The Examiner has concluded as much absent any showing of criticality or unexpected results on the part of the Applicants. This line of reasoning is proper in the instance when the steps of a process, such as changes in the sequence of adding ingredients, are altered or slightly modified. That is, this rationale is appropriate if there are no novel steps added to the method or

process. The instant claims are directed at a method which is entirely unique, which contains novel steps, and from which the Hurd reference expressly teaches away. Therefore, the "modified recipe" rejection is inappropriate in the present case, and it should be withdrawn accordingly.

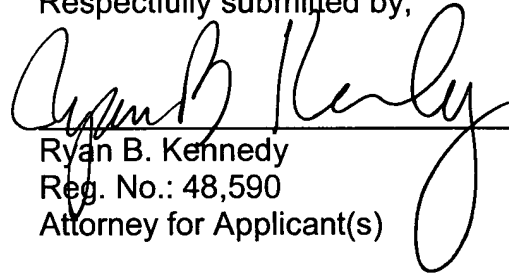
The Examiner acknowledged that the results garnered by the present invention would have been desirable. However, the Office Action fails to refer to any prior art that discloses the novel steps of loading the parameter sets prior to collecting image data and processing the image data after all image data has been collected. In sum, the Examiner lacks a reference that singularly and completely sets forth the elements of the independent claims 19, 29, and 35. Therefore, as claims 19, 29, and 35 cannot be per se obvious, they are appropriately in condition for allowance. Claims 20-28, 30-34, and 36-37 depend, either directly or indirectly, on the independent claims and are therefore allowable as well.

If the Examiner believes personal communication would be advantageous to the disposition of this case, applicants respectfully request that the Examiner contact the attorney of the applicants at the earliest convenience of the Examiner.

Applicants request that you charge Deposit Account No. 23-1925 for any further fees which may be due. A duplicate copy of this document is enclosed for this purpose.

Date: October 24, 2002

Respectfully submitted by,



Ryan B. Kennedy  
Reg. No.: 48,590  
Attorney for Applicant(s)

BRINKS HOFER GILSON & LIONE  
P.O. Box 10395  
Chicago, IL 60610  
(734) 302-6000

Appendix A

19. (Twice Amended) A method of generating multiple images of a patient using an imaging device[,] comprising the following steps [in the order set forth below]:

[(a)] introducing a contrast material into said patient;

[(b)] loading a plurality of parameter sets into said imaging device, each of the plurality containing at least one parameter that corresponds to one of said multiple images;

[(c)] retrieving a first parameter set from the plurality of parameter sets;

[(d)] collecting first image data of a first view of said patient according to the first parameter set;

[(e)] stopping the collecting first image data for a delay period;

[(f)] retrieving a second parameter set from the plurality of parameter sets;

[(g)] collecting second image data of a second view of said patient according to the second parameter set; [and]

followed by the step of:

[(h)] processing the first and second image data to produce said multiple images of said patient.

29. (Twice Amended) A method of generating multiple images of a patient using an imaging device [,] comprising the following steps [in the order set forth below]:

[(a)] introducing a contrast material into said patient;

[(b)] loading a plurality of parameter sets into said imaging device, each

of the plurality containing at least one parameter that corresponds to one of said multiple images;

[(c)] indexing said imaging device to a first parameter set in the plurality;

[(d)] collecting first image data;

[(e)] stopping the collecting first image data for a delay period;

[(f)] sequentially indexing said imaging device to each parameter set in the plurality, collecting further image data for each parameter set; [and]

followed by the step of:

[(g)] processing the first and further image data to produce said multiple images of said patient.

35. (Twice Amended) A method of generating multiple images of a patient using an imaging device [,] comprising the following steps [in the order set forth below]:

[(a)] loading a plurality of parameter sets into said imaging device, each of the plurality containing at least one parameter that corresponds to one of said multiple images;

[(b)] [sequentially] collecting a first set of image data of [said] the patient [by sequentially advancing through the] corresponding to a first one of said parameter sets;

[(c)] stopping the collecting image data for a delay period between each parameter set; and]

retaining said first set of image data during a delay period;

collecting a second set of image data of the patient corresponding to a

second one of said parameter sets following the delay period;

followed by the step of:

[(d)] processing [the] said first set of image data and said second set of image data to produce said multiple images of said patient.